

MISCELLANEOUS VENTURA COASTAL WMA

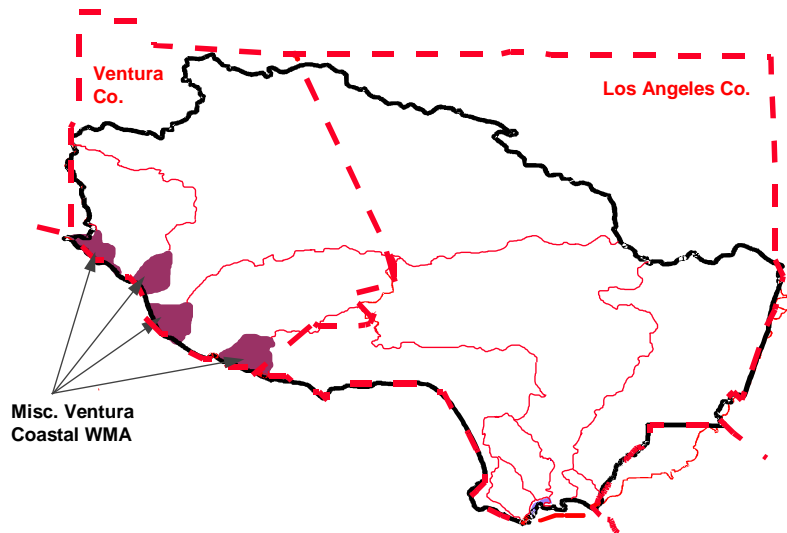
This Watershed Management Area was targeted for permitting purposes in FY00/01.

Overview of WMA

The WMA is composed of four separate coastal drainage areas located between the Regional boundary, the Ventura River, Santa Clara River, and Calleguas Creek Watersheds, as well as, the Santa Monica Bay WMA. The drainage areas are typified by either small coastal streams, wetlands, or marinas.

Channel Islands Harbor:

Channels Islands Harbor is located south of the Santa Clara River and is in the immediate vicinity of considerable residential development and some agricultural land. The Southern California Edison inlet canal to the Ormond Beach Generating Station is located at the north end of the harbor. The harbor is home to many recreational boats and two boatyards.



Port Hueneme Harbor: Port Hueneme is a medium-sized deepwater harbor located in Ventura County, north of Mugu Lagoon. Part of it was operated by a U.S. Navy Construction Battalion until very recently while the rest of the harbor serves as a commercial port operated by the Oxnard Harbor District. The construction of a majority of the harbor was completed in 1975. The commercial side generally serves ocean-going cargo vessels and oil supply boats; the latter serve the oil platforms in the Santa Barbara Channel. Two endangered bird species may use the harbor, the California Brown Pelican and the California Least Tern.

Ventura Marina: Ventura Marina is a small craft harbor located between the mouths of the Ventura and Santa Clara Rivers. It is home to numerous small boats and two boatyards. The "Ventura Keys" area of the marina is a residential area situated along three canals. The marina is surrounded by agricultural land and a large unlined ditch drains into the Keys area. Since the marina is between the mouths of two rivers which discharge large sediment loads from their relatively undeveloped watersheds, the marina has a constant problem with keeping the entrance channel open.

McGrath Lake: McGrath Lake is a small brackish waterbody located just south of the Santa Clara River. The lake is located partially on State Parks land and partially on privately-owned oilfields in current production. A number of agricultural ditches drain into the lake. A state beach is located off the coastal side of the lake. The habitat around the lake is considered to be quite unique and it is utilized by a large number of overwintering migratory birds.

Beneficial Uses in WMA

Channel Islands Harbor

Industrial service supply
Contact & noncontact
water recreation
Navigation
Commercial & sportfishing
Marine habitat
Wildlife habitat

Port Hueneme Harbor

Process water supply
Contact & noncontact
water recreation
Navigation
Commercial & sportfishing
Marine Habitat
Wildlife habitat

Ventura Marina

Industrial service supply
Contact & noncontact
water recreation
Navigation
Commercial & sportfishing
Marine habitat
Wildlife habitat
Shellfish harvesting

Ormond Beach

Industrial water supply
Contact & noncontact water
recreation
Wildlife habitat
Wetlands habitat
Protection of rare &
endangered species
Navigation
Power generation
Commercial & sportfishing
Marine habitat
Shellfish harvesting

Ormond Beach Wetlands and McGrath Lake

Estuarine habitat
Contact & noncontact water
recreation
Wildlife habitat
Wetlands habitat
Protection of rare &
endangered species

Open Coastline: A major feature of the coastline north of Mugu Lagoon is Ormond Beach and Ormond Beach Wetlands. There are a number of scenarios under consideration for restoration of this degraded yet valuable wetlands.

Water Quality Problems and Issues

Channel Islands Harbor:

The harbor is on the 1998 303(d) list for lead and zinc. During the early to mid-1980s, the SMWP found low to intermediate levels of

metals and organics except for one especially high accumulation of DDT. Sediment sampling for metals conducted by Regional Board staff in 1988 revealed slightly to moderately elevated levels. Copper at one site was nearly 50 ppm and zinc was as high as 76 ppm. Arsenic was slightly elevated (4 ppm) at a sampling site located next to a drain possibly connected to a nearby agricultural field. Under the BPTCP, the harbor is listed as site of concern due to DDT and silver sediment concentrations and sediment toxicity (but not recurrent toxicity); further monitoring is needed here.

Port Hueneme Harbor: The harbor is on the 1998 303(d) list for PAHs, DDT, PCBs, TBT, and zinc. The SMWP has found elevated levels of Cu, Zn, PAHs, and PCBs. Zinc was at elevated levels on the commercial side while PCBs were very high on the Navy side. The Navy side is suspected of using large amounts of pentachlorophenol (PCP) for treatment of wood pilings. An Army Corps DEIR released in 1985 covering extension of one channel stated that water quality was good. The document also briefly discussed the port's biota which CDFG found to be "fairly healthy" and typical of southern California harbors. Sediment core samples were collected in 1985 and 1996 as part of a proposed dredge project. Relatively low levels of metals were found and no pesticides were detected. It may well be that flushing is good in the harbor and only locating a station directly next to a source will result in bioaccumulation. The BPTCP found fairly minimal levels of sediment toxicity in recent testing but the harbor is considered a site of concern under the program due to accumulation of DDT, PCBs, TBT, PAHs, and zinc in mussel tissue. Further monitoring is needed here.

The harbors

- One deepwater harbor and two small-craft marinas
- Accumulation of metals, PCBs, and historic pesticides in sediment and tissue
- Support considerable marine life

The wetlands and coast

- Historic pesticide contamination
- Loss of quality habitat
- Impacts from oil spills
- Use by endangered species

Ventura Marina: The marina (the Keys area) is on the 1998 303(d) list for coliform problems. The City of Ventura monitors six stations within the Keys and the nearby Arundell Barranca (open drain carrying mostly agricultural runoff) for coliform on a regular basis. There are currently ongoing discussions concerning the possibility of re-rerouting the barranca away from the marina. The SMWP has found moderately elevated levels of metals, DDT, and chlordane in

the marina from sampling conducted in the late 1980s; however, it is not listed as a site of concern under the BPTCP.

McGrath Lake: The lake is on the 1998 303(d) list for pesticides. The BPTCP found varying amounts of sediment toxicity and sediment levels of many pesticides were very high; the lake is listed as a toxic hot spot due to sediment concentrations of DDT, chlordane, dieldrin, toxaphene and endosulfan above sediment quality guidelines. A characterization study is ongoing and restoration work is being planned. A major crude oil spill into the lake occurred in late 1993 and runoff from nearby agricultural fields is ongoing.

Open Coastline: Little is known of water quality in the Ormond Beach area. The Oxnard Treatment Plant discharges secondary effluent to the ocean off of Oxnard. The facility is currently investigating approaches to remove upstream brine dischargers in order to move toward water reclamation. Part of the reclaimed water is proposed for use in a seawater intrusion barrier project to protect the Oxnard Plain ground water basin. The ocean immediately off of the coast was part of Bight'98 and the 1994 Southern California Bight Pilot Project.

Permitted discharges:

- 24 NPDES discharges including three major discharges (one POTW and two generating stations), 13 minor discharges, and eight covered by general permits
- 77 dischargers covered under an industrial storm water permit
- 46 dischargers covered under a construction storm water permit

Types of permitted wastes discharged into the Misc. Ventura Coastal WMA:

Nature of Waste <i>Prior</i> to Treatment or Disposal	# of Permits	Types of Permits
Nonhazardous (designated) contaminated groundwater	1	Minor
Nonhazardous (designated) domestic sewage & industrial waste	1	Major
Nonhazardous (designated) wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage	5	Minor
	4	General
Nonhazardous (designated) noncontact cooling water	1	Major
Nonhazardous (designated) process waste (produced as part of industrial/manufacturing process)	1	Major
	1	Minor
Nonhazardous (designated) stormwater runoff	1	Minor
Nonhazardous (designated) filter backwash brine waters	1	Minor
Nonhazardous (designated) washwater waste (photo reuse washwater, vegetable washwater)	1	Minor
Inert wastes from dewatering, rec. lake overflow, swimming pool wastes, water ride wastewater, or groundwater seepage)	2	General

Hazardous wastes are those influent or solid wastes that contain toxic, corrosive, ignitable, or reactive substances (prior to treatment or disposal) managed according to applicable Department of Health Services standards

Designated wastes are those influent or solid wastes that contain **nonhazardous** wastes (prior to treatment or disposal) that pose a significant threat to water quality because of their high concentrations

Nonhazardous wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Inert wastes are those influent or solid wastes that do not contain soluble pollutants or organic wastes (prior to treatment or disposal) and have little adverse impact on water quality

Major discharges are POTWs with a yearly average flow of over 0.5 MGD or an industrial source with a yearly average flow of over 0.1 MGD and those with lesser flows but with acute or potential adverse environmental impacts.

Minor discharges are all other discharges that are not categorized as a Major. Minor discharges may be covered by a general permit, which are issued administratively, for those that meet the conditions specified by the particular general permit.

Most of the 24 NPDES permittees in the watershed discharge to the ocean and to Port Hueneme.

Of the 77 dischargers enrolled under the general industrial storm water permit in the watershed, the majority occur in the city of Oxnard. Many of these businesses are involved with trucking, food packing, or watercraft maintenance. Sixty-two of the facilities are larger than one acre in size while seventeen are larger than ten acres in size.

There are 4 construction sites enrolled under the construction storm water permit; all are under ten acres in size.

IMPAIRMENTS:

The table below gives examples of typical data ranges which led to the listings.

Impairments	Applicable Objective/Criteria	Typical Data Ranges Resulting in Impairment	303(d) Listed Waters/Reaches
Beach closures	Basin Plan narrative objective	10 - 37 days/year closed	McGrath Beach Mandalay Beach
Coliform	Basin Plan numeric objective: Inland: fecal coliform not to exceed log mean of 200 mpn/100ml in 30-day period and not more than 10% of samples exceed 400 MPN/100ml Beaches: total coliform not to exceed 1,000 MPN/100ml in more than 20% of samples in 30 days and not more than 10,000 MPN/100ml at any time	Objective was exceeded from 32 - 75% of time	Santa Clara River Estuary Beach/Surfers Knoll McGrath Beach Ventura Harbor: Ventura Keys
Sediment toxicity	Basin Plan narrative objective		McGrath Lake
Chlordane (sediment)	Basin Plan narrative objective	160 ng/g	McGrath Lake
DDT (sediment & Tissue)	Basin Plan narrative objective State Board numeric objective (tissue): Max. Tissue Residue Level 32.0 ng/g	3,000 ng/g (sediment) 700 ng/g (tissue)	McGrath Lake Port Hueneme Harbor
PCBs (tissue)	Basin Plan narrative objective State Board numeric objective (tissue): Max. Tissue Residue Level 2.2 ng/g	2,000 ng/g	Port Hueneme Harbor
PAHs (sediment)	Basin Plan narrative objective	10,000 ng/g	Port Hueneme Harbor
Zinc (sediment & tissue)	Basin Plan narrative objective	320 - 400 ng/g (tissue) 380 ng/g (sediment)	Port Hueneme Harbor Channel Islands Harbor
Lead (sediment)	Basin Plan narrative objective	180 ng/g	Channel Islands Harbor
Tributyl tin (tissue)	Basin Plan narrative objective	7,000 ng/g	Port Hueneme Harbor

CURRENTLY SCHEDULED TMDLS

Type of TMDL	Listed Waters/Reaches in TMDL	Year Scheduled for Completion (FY)
coliform	McGrath Beach Mandalay Beach	02/03
zinc	Port Hueneme Harbor	04/05

We see a need for an additional 0.7 PY for FY02/03 TMDL work conducted in this watershed.

Stakeholder Group

Ormond Beach Task Force Ormond Beach is part of the Miscellaneous Ventura Coastal WMA; the area includes a somewhat degraded wetlands which has considerable restoration potential. The Task Force was formed in 1993 and meets on an infrequent basis to address issues and projects which may affect the beach and wetlands.

Past Significant Activities

NONPOINT SOURCE

A recently concluded project funded by CWA Section 319(h) funds involved demonstrated advanced treatment processes of nutrients and pathogens utilizing septic systems.

MONITORING AND ASSESSMENT

McGrath Lake: A Consent Decree established a settlement with the responsible party in a 1993 crude oil spill. The settlement created a Trustee Council (California Department of Fish and Game, U.S. Fish and Wildlife Service, and California Department of Parks and Recreation) to determine how to spend \$1.315 million targeted for natural resource restoration.

The Trustee Council formally requested assistance from the Regional Board to perform a study to characterize the water quality and sediments within the lake, as well as sources of contaminant inputs to the lake. The main objectives of the study were to determine whether it would be necessary or beneficial to dredge the lake to remove contaminated sediments, and whether it would be beneficial to spend funds on habitat improvement projects in and around the lake, given the ongoing potential contaminant inputs and uncontrolled water management activities. The Regional Board funded the characterization study (contributing \$100,000) using some of the money the Board received from the oil spill settlement.

A preliminary study was conducted in August 1998 to aid in selection of sampling sites for the characterization study. The characterization study was conducted in October 1998 and included:

- 1) water quality measurements at several locations in the lake (temperature, dissolved oxygen, pH, and nutrient data)
- 2) surficial sediment samples at 10 stations in the lake will be analyzed for grain size, sediment chemistry (pesticides, petroleum hydrocarbons, metals) and sediment toxicity
- 3) deep sediment cores at 7 stations in the lake will be subsampled for sediment chemistry analyses
- 4) water column measurements at one station in an agricultural drain entering the lake (pesticides, metals, and nutrients)
- 5) sediment chemistry (pesticides and metals) at 2 stations in agricultural drains

Current Activities

CORE REGULATORY

Continuing core regulatory activities that will be integrated into the watershed management approach include (but are not limited to) necessary renewal/revision of NPDES permits. Compliance inspections, review of monitoring reports, response to complaints, and enforcement actions relative to the watershed's NPDES permits will continue.

Additionally, most urban areas in Ventura County, including this watershed, are implementing Best Management Practices (BMPs) under the Municipal Storm Water Permit (revised in 2000). The "Discharger" consists of the co-permittees Ventura County Flood Control District, the County of Ventura, and the Cities of Camarillo, Fillmore, Moorpark, Ojai, Oxnard, Port Hueneme, San Buenaventura, Santa Paula, Simi Valley, and Thousand Oaks. The Discharger is required to implement the Ventura Countywide Stormwater Quality Urban Impact Mitigation Plan (SQUIMP), which requires the implementation of BMPs to reduce the discharge of pollutants in storm water from new development and significant redevelopment. Other

requirements of the Municipal Storm Water Permit include a public education program, an educational site inspection program for industrial and commercial facilities, program for construction sites, public agency activities, and a storm water monitoring program.

The storm water monitoring program has consisted of land-use based monitoring, receiving water and mass emission station monitoring, and bioassessment. The Discharger also participates in regional monitoring activities, such as the Storm Water Monitoring Coalition, organized by the Southern California Coastal Water Research Project. Furthermore, the Discharger participates in the development and implementation of volunteer monitoring programs in the Ventura Coastal watersheds.

The Miscellaneous Ventura Coastal WMA receives municipal storm drain discharges from the City of Oxnard (part), City of Port Hueneme, and City of San Buenaventura (part).

MONITORING AND ASSESSMENT

The monitoring needs in this WMA include staff to evaluate coastal receiving water data, sediment data analysis and interpretation, resources to integrate surface and ground water data, and resources to evaluate other information (e.g., pesticide and fertilizer use databases as well as those for grower/crop and crop timing).

McGrath Lake: The characterization study previously conducted demonstrated widespread sediment contamination throughout most of the lake, including high concentrations of several trace metals and pesticides. Prior to undertaking a sediment cleanup and habitat restoration program, it would be useful to eliminate or reduce on-going sources of contamination, e.g., agricultural runoff. The Trustee Council plans to release a restoration plan shortly and work with local stakeholders to develop solutions to these problems.

Shoreline: Beginning in 1999, a new law (AB411) requires public health officials in coastal counties to conduct weekly testing, between April 1 and October 31, at beaches visited annually by more than 50,000 people and at adjacent storm drains (including natural creeks, streams, and rivers, that flow during the summer. Due to the popularity of Ventura County beaches for year-round activities, the Ventura County Board of Supervisors authorized the implementation of a program that expanded the monitoring program to all 12 months of the year. Ventura County Environmental Health Department conducts weekly surf zone sampling at 52 beach locations for total and fecal coliform and enterococcus. Data will be reviewed by the Regional Board and used to assess current conditions of Ventura County beaches for future 305(b) reports. Monitoring results are at posted at http://www.ventura.org/env_hlth/ocean.htm.

Open Coastline: Our source of data for the coastal areas comes chiefly from the one POTW and two generating stations which discharge offshore as well as regional data from Bight'98 and the 1994 SCBPP. These data support compliance evaluation.

WETLANDS PROTECTION AND MANAGEMENT

The [Southern California Wetlands Recovery Project](#) has listed Ormond Beach Wetlands acquisition and preparation of a restoration plan as a priority project for funding. The project involves acquisition of 600 acres of wetlands and dunes parcels privately-owned and implementation of an existing restoration plan for these parcels.

BASIN PLANNING

The 2001 Triennial Review identified adoption of TMDLs as Basin Plan amendments the highest priority issue that can be accomplished with current levels of funding. Approximately 0.5 PYs/TMDL would be utilized.

Basin Planning activities will include continued participation in both internal and external watershed planning efforts and further incorporation of watershed management and principles and watershed-specific priorities into future updates of the Basin Plan, where appropriate.

NONPOINT SOURCE PROGRAM

We are encouraging application for Proposition 13 funding for use in preparation of a watershed management plan for this watershed management area.

Groundwater

The Oxnard Forebay is a prime groundwater recharge area that is impacted by nitrogen discharges, mainly from densely populated communities using septic systems, and agricultural areas. The Regional Board undertook a study of septic systems in the area during FY98/99; in August 1999 the Board adopted a Basin Plan amendment to prohibit septic systems in the Oxnard Forebay. The amendment immediately prohibits the installation of new septic systems or the expansion of existing septic systems on lot sizes of less than five acres. Discharges from septic systems on lot sizes of less than five acres must cease by January 1, 2008. This prohibition will affect up to 3,000 septic systems and ten to fifteen thousand people. The County of Ventura has applied for Small Community Grant funding to provide adequate sewage treatment on behalf of the Saticoy and El Rio communities.

Another **319(h)** project is underway which also involves septic tanks. The Scope of Work for this project is still being developed but will involve the evaluation of several systems for nutrient removal.

A well head protection and demonstration project in the Fox Canyon Groundwater Management Area is being funded with **319(h)** monies. This project is destroying disused drinking water wells which may serve as a conduit for contamination to reach the deep water aquifer.

Currently under consideration are agreements with sister agencies in regulatory-based encouragement of Best Management Practices. Most notably is the use of a GIS layer for pesticides application available from the Department of Pesticide Regulation (DPR). Reduction of pesticides identified as contaminants of concern for a watershed might be addressed through a Management Agency Agreement (MAA) with the DPR, or through waiving adoption of waste discharge requirements on an individual basis using information gathered in databases provided by the Ventura County Agricultural Commission office.

Marinas

There are a number of marinas in this WMA, all with well-documented levels and types of pollution consistent with nonpoint sources. We have initiated enforcement actions on several commercial fishing operations to ensure compliance with state discharge requirements. We will be focusing our 319(h) priorities for the upcoming application period on a number of areas of concern in the Region including development of education and outreach programs and

implementation of management measures which are intended to reduce pollution from these nonpoint sources in marinas. A particular area of concern in Port Hueneme has been management of squid wastes from fishing vessels.

Near-term Activities

Specific resource needs are described in the Region-wide Section of this document.

A preliminary review of resources for core regulatory activities against cost factors has determined that our region is seriously underfunded for our baseline program. We will be seeking more funding for our core program activities.

The monitoring needs in this WMA include staff to evaluate coastal receiving water data, sediment data analysis and interpretation, resources to integrate surface and ground water data, and resources to evaluate other information (e.g., pesticide and fertilizer use databases as well as those for grower/crop and crop timing). This watershed will be a focus for SWAMP monitoring in FY04/05.

Most watershed programs look to the Regional Board as the information management agency for the collected data. To meet that need, we require additional resources related to data management and interpretation. Some of the expenditures under NPDES support the monitoring that will ultimately be used to identify and quantify nonpoint source inputs.

We will maintain involvement with stakeholder activities and pursue funding options, especially those involving implementation of nonpoint source measures (coordinate 205(j) and 319(h) activities) as well as other outreach activities such as speeches, meetings, and participation in environmental events. With additional resources we propose conducting a number of education and outreach activities including holding regional workshops and conferences with other Regional Boards as well as experts in the field, contacting marina operators individually, and offering an incentives program.

Potential Long-term Activities

Arrundell Barranca: The Regional Board staff have been approached by the City of San Buenaventura for input on a potential project to re-route the Arrundell Barranca from Ventura Harbor to the Santa Clara River estuary. The proposal calls for a constructed wetlands near the estuary to treat the Barranca's water before entering the Santa Clara River. The project is proposed as a method of dealing with periodic coliform exceedances in areas of the Ventura Harbor/Ventura Keys.

Seawater Intrusion into the Oxnard Plain: The City of Oxnard is attempting to remove high TDS inputs to their treatment plant with the ultimate goal of reuse of the wastewater for a seawater intrusion barrier project in the Oxnard Plain.

Implementation of watershed-wide biological monitoring: This is a long-term goal for all of our watersheds.